

Remarks/Arguments

Claims 1 and 4 have been canceled. The remaining independent claim 8 has been further amended to recite:

(1) contact between the cross member and the rear support section in the first position of the wheel carriage,

(2) contact between the cross member and the middle of the platform in the third position of the wheel carriage so as to support the load when the platform is between the wheels and level above the ground, and

(3) reciting the extent of tilt of the barrow in which the pivoting gate is effective.

The first limitation more clearly defines the structure and cooperation between the cross member and the inclined rear wall in the recited "first position" to reflect the mode of operation described on page 5, lines 15-18 and depicted in Figs. 4 and 5 of the drawings so as to elevate the barrow for transporting empty to the loading site.

The second limitation more clearly defines the structure that enables the cross member to balance and support a load over the middle of the platform in the recited "third position" when the platform is level in the manner taught by the Hall patent.

The third amendment recites the action of the gate to retain the load when tilting the platform on the toe end in order to distinguish it from the function of the gate in the Pipkin patent to retain the load during transport.

Dependent claims 2, 3, 5 and 7 have been amended to depend on claim 8 and claim 6 has been amended to depend on claim 5.

In response to the Examiner's Exhibit A drawing of a modified Fig. 6 of the newly applied Eriksson patent 3,594,932, the Applicant has furnished Exhibit B to demonstrate the failure of this reference to teach the Applicant's invention, even as modified, in hindsight, by the Examiner.

Reconsideration of the rejection of claims 2, 3, and 5-8, as amended, is respectfully requested.

Rejection of Claims 1 - 3 under 35 U.S.C 103(a) as being unpatentable over Eriksson (3,594,932) in view of Hall (5,810,543) or Pipkin (2,930,152).

Claim 1 has been cancelled. Claims 2 and 3 have been amended to depend on claim 8, so they will be discussed after addressing the rejection of independent claim 8, as amended.

Claims 4-6 and 8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson in view of Pipkin.

Eriksson describes a combined snow plow and garden cart. Applicant concurs with the Examiner's description of Eriksson's structure on page 2 of the Final Office Action applying Eriksson to now cancelled claim 1, but strongly disagrees with the concluding statements on page 3 of the Final Office Action. There, the Examiner erroneously states that in the "third position", referring to Fig. 4 of Eriksson, "said cross member contacts the middle of said platform when the platform is level above the ground".

Applicant has recited the platform as "a substantially flat platform arranged to rest flat on the ground, the platform having a toe end and a heel end" and recited a rear wall "extending upwardly from the heel end of the flat platform". The middle of the flat platform must therefore necessarily be halfway between the toe end and the heel end. Fig 1 of Eriksson shows the flat platform portion of container 10 resting on the ground. This places the mid point of the flat platform approximately above the dot over the "i" in "Fig. 1". The cross member of the wheel carriage is nowhere near this point in Fig. 4. This is not a matter of quibbling with words. The present invention is an improvement over the Hall patent. The Hall patent utilizes the defined structure recited in the preamble of claim 8 to carry and balance a load supported by a cross member located in the middle of a flat platform. Eriksson depends on balancing a load centered toward the rear in the rounded belly of container 10. If the load were confined to the flat portion (on the right side of the wheels in Fig. 4) it would likely be impossible to hold the platform level against an unbalanced load of any significant weight.

The Examiner has furnished Exhibit A showing a modified rear half of Eriksson's container 10. The flat platform portion of Eriksson has been extended to a point "B" representing a new "heel end" of the flat platform, and then an inclined back wall drawn from the new "heel end". The pivot points of the wheel carriage arms have then been relocated so that the wheel carriage contacts the inclined wall at a point "A". However, this modified reference, constructed with the benefit of hindsight, overlooks the requirement that the cross member contact the middle of the platform when the platform is level above the ground. Applicant is submitting Exhibit B that is superimposed on the Examiner's Exhibit A. Exhibit B adds the midpoint "C" of the platform (halfway between

the toe end and the new heel end provided by Exhibit A). Rather than tilting the barrow in the drawing, the ground level has been tilted and a load shown on the platform centered above the midpoint "C". Applicant respectfully submits that Exhibit B makes it clear that the Examiner has mischaracterized the teaching of Eriksson in a very important respect .

Pipkin describes a wheeled shovel comprising a scoop at one end of a handle, together with wheels mounted on a triangular frame that is pivotable to a position beneath the shovel. Pipkin has been cited to show a pivotable gate. Applicant concurs with the Examiner's description of Pipkin's structure insofar as it is applicable to claims 4, 5 and 6, but disagrees that Eriksson in view of Pipkin show that the subject matter of claim 8 would have been obvious, for the reason stated above in discussion of the Eriksson patent, as well as the following observations on Pipkin's wheeled shovel and what it teaches.

The operation of Pipkin's shovel is as follows, as described in the patent. When used as a shovel, the apparatus is deployed as shown in Fig. 2, with the wheel frame pivoted back against the handle and held in the raised position by fastener 44. (Col 2, lines 16-23). The shovel is forced into the ground or load with a pointed, sharpened or otherwise shaped front cutting edge (Col 2, lines 39-47; Fig.3).

When used to transport a load, the shovel is deployed as shown in Fig. 1 with the wheeled frame released and pivoted beneath the scoop. Because the handle extends almost straight out behind the scoop (so it can be used as a shovel) the shovel is transported with the bottom wall of the scoop in an inclined position (Fig. 1). If the bottom of the scoop were held level, the handle would be almost as close to the ground as the bottom of the scoop and it would necessary to transport the load while holding the handle from a stooped position. The pivotable gate is therefore necessary to retain the load during transport. Otherwise it would dump from the inclined scoop.

It is submitted that it is not obvious to use a structure intended for one purpose (i.e. to retain a load in an inclined scoop during transport from one location to the next) for a substantially different purpose (i.e. to retain the load while tilting a convertible barrow so that a cross member holding wheels can pivot through a minimum tilt angle). Although applicant's gate also performs load retention functions during transport, this is minimal because the platform is level and is not the main purpose of the gate.

It has already been pointed out in the record that the Hall patent shows a removable gate to retain the load when the barrow is tilted on the toe end. Hall's gate has the

inconvenience of inserting a separate gate member between the side walls at the toe end when tilting the barrow and then removing it when unloading the barrow. The pivotable gate greatly simplifies the process of loading, converting the barrow from ground level to transporting position and then unloading the barrow as shown in Applicant's Figs. 6-10.

The teaching of Pipkin to employ a pivotable gate on a wheeled shovel for one purpose does not necessarily make it obvious to one skilled in the art to use it for a different purpose..

With reference to rejection of dependent claims 5 and 6, claim 6 being dependent on claim 5, Applicant agrees that Pipkin shows a closure member having the features of pivot arms terminating in pins which are flexible in a lateral direction to permit the pins to be withdrawn from holes in opposed sidewalls. However, these features are recited as preferred structures and Applicant is entitled to claim his invention in varying degrees of specificity. Claims 5 and 6 are believed to be patentable for the same reasons as detailed above in connection with claim 8, since they are dependent on claim 8.

Rejection of Claims 2 and 3 under 35 U.S.C 103(a) as being unpatentable over Eriksson (3,594,932) in view of Hall (5,810,543) or Pipkin (2,930,152).

Claim 2 recites a rear wall being inclined so as to form an included angle with said platform about said heel end on the order of 120°. Erickson does not show this until modified by the Examiner. Pipkin and Hall show such a rear wall, but this is meaningless because their rear walls have no operative cooperation with the recited cross member contacting such inclined rear wall.

Claim 3 recites a preferred locus of first pivot points along a vertical line drawn from a point on the platform that is one quarter of the distance from the heel end to the toe end of the platform. None of the references show this. Applicant submits that this is not a matter of cutting and fitting to improve the operation, but is a recitation of a preferred choice of locations of first pivot points which gives a new and improved result, ie. a minimum tilt angle.

Claims 2 and 3 have been amended to depend on claim 8 and are believed to be patentable for the same reasons as detailed above in connection with claim 8, since they are dependent on claim 8.

Rejection of Claim 7 under 35 U.S.C. 103(a)

Claim 7 is rejected under the above references further in view of Zamaria – U.S. Patent 5,123,187. Zamaria shows a rather complicated handle and cable arrangement for opening a pivotable, normally closed shutter 14 and means to lock it open against the closing biasing force of a spring (Col. 3, lines 1-30). While Zamaria meets the recitation of claim 7, Zamaria is dependent on claim 8, which applicant submits is unobvious for reasons stated above in the discussion of claim 8.

Conclusion

Applicant reiterates that this is an old and crowded art and such teaching of bits and pieces of the claimed invention is to be expected in such a case. However, as demonstrated above, the invention has been recited to clearly define a structure which improves over the basic Hall patents by adding a new function of operation by way of a convertible barrow that provides minimum tilt angle, inclined rear wall to facilitate transport of the barrow in an unloaded condition, pivotable gate to be closed to steady the load during such minimum tilt and which also permits ground level loading of tall objects when open. Reconsideration of the rejection of claims 2, 3, and 5- 8, as amended, is respectfully requested and it is asked that the case be passed to issue.

Respectfully,


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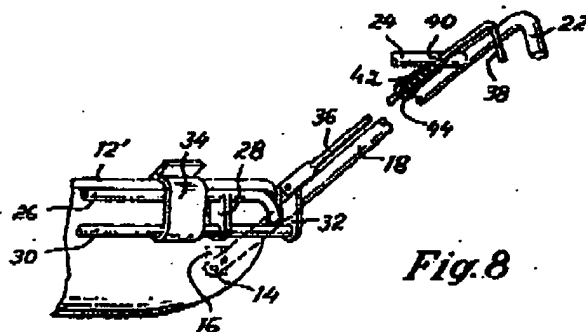
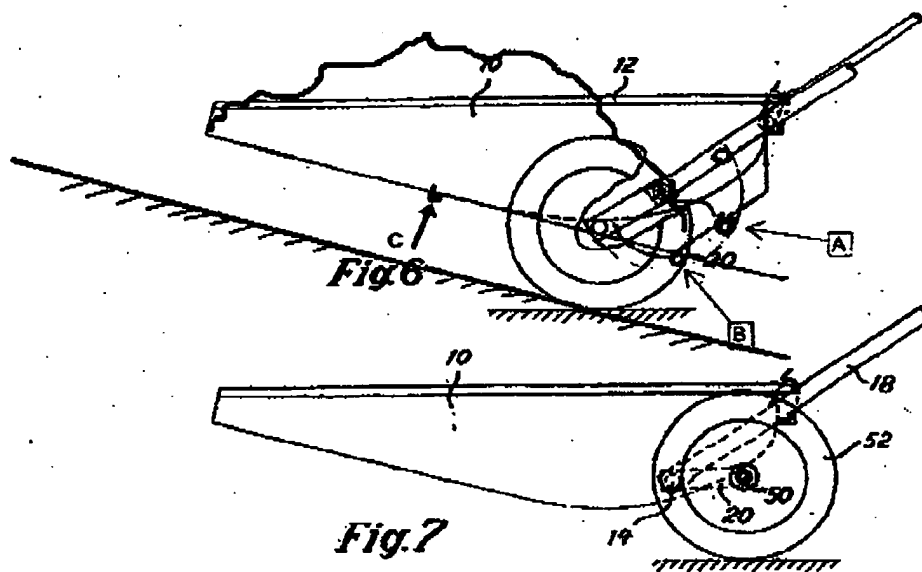
Fax. No. 203-577-2012

Exhibit B

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SHEET 2 OF 2

3,594,932



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